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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,227	03/16/2001	Geoffrey Howard Blackham		7870

7590 03/08/2004
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EXAMINER

WALLACE, SCOTT A

ART UNIT	PAPER NUMBER
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2671

DATE MAILED: 03/08/2004/

12

Please find below and/or attached an Office communication concerning this application or proceeding.

PRQ

Office Action Summary	Application No. 09/811,227	Applicant(s) BLACKHAM ET AL	
	Examiner Scott Wallace	Art Unit 2671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11/11-19-03</u> | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments with respect to claims 6-11 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 6-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claim discloses where a low resolution image from a first source and a high resolution image from a second source, where the second source is different from the first source are combined. However, the closest thing in the specification that talks about two different sources is an image generator with multi-channel outputs (pg 4).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious

at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lechner et al., U.S. Patent No. 5,487,665 in view of Skolmoski, U.S. Patent No. 6,574,352 in further in view of Harrington et al., U.S. Patent No. 5,737,455.

5. As per claim 6, Lechner et al discloses a method of operating image display apparatus, which method comprises combining a low resolution image component from a first source (column 1 lines 15-17 and column 2 lines 20-25), and a high resolution image component from a second source which is different from the first source (column 1 lines 15-17 and 49-55); whereby the high resolution image component is able to be positioned anywhere in a display obtained from the image display apparatus (column 1 lines 15-17 and 49-55). Although Lechner et al does not specifically teach that the low resolution image is a wide field of view and the high resolution image is a narrow field of view, this is disclosed in Skolmoski in column 1 lines 15-20. It would have been obvious to one of ordinary skill in the art to use wide field of view with low resolution and narrow field of view with high resolution because this gives the user a compromise between seeing the whole image and specific details which saves on memory requirements. Only using high resolution would require more memory, but having both saves on memory because low resolution requires less. Also Lechner et al does not disclose combining in a common pixel format of the high resolution image. This is disclosed in Harrington et al in column 3 lines 7-15 and column 4 lines 20-31. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine images in a high resolution format as in Harrington with the system of Lechner because this would reduce aliasing (column 3 lines 7-15).

6. As per claim 7, Lechner et al does not disclose in which the low resolution image is resampled to increase the pixel count to that of the highest resolution imagery. However, this is disclosed in Harrington et al in column 4 lines 20-31 (scaling up the image would increase the pixel count). It would have been obvious to one of ordinary skill in the art at the time the invention was made to increase the pixel count of

the low resolution image to the high resolution image of Lechner by resampling as in Harrington et al because sampling was a well known and efficient technique to increase the pixel count.

7. As per claim 9, Lechner et al does not disclose in which the composite imagery is stored in a frame buffer. It was well known in the art at the time the invention was made that frame buffers were used to store data to be displayed on standard displays. It would have been obvious to one of ordinary skill in the art at the time of the invention was made to use a frame buffer because this would allow the images to be displayed on standard displays.

8. As per claim 10, Lechner et al discloses in which the frame buffer is segmented to drive a matrix of display devices (fig. 1)

9. As per claim 11, Lechner et al discloses in which the low resolution wide field of view image component is of a background scene (column 2 lines 20-25), and in which the high resolution narrow field of view image component is of a target (column 5 lines 39-42).

10. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lechner et al., U.S. Patent No. 5,487,665 in view of Skolmoski, U.S. Patent No. 6,574,352 in further in view of Harrington et al., U.S. Patent No. 5,737,455 in further in view of Kishimoto, JP 10164468A.

11. As per claim 8, Although Lechner with Skolmoski and Harrington do not disclose interpolating the pixel count when going from a low resolution image to a high resolution image, this is disclosed in Kishimoto. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use interpolation for going from low resolution to high resolution because this would save on cost.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Scott Wallace** whose telephone number is **703-605-5163**.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Mark Zimmerman**, can be reached at 703-305-9798.

Any response to this action should be mailed to:

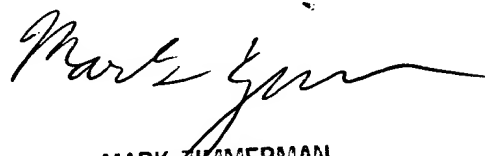
Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.


MARK ZIMMERMAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600